

**Montana Board of Oil and Gas Conservation  
Environmental Assessment**

**Operator:** Somont Oil Company, Inc.  
**Well Name/Number:** Ferdig Swift Flood Unit 30  
**Location:** NW NW Section 27 T35N R1W  
**County:** Toole MT; Field (or Wildcat) Kevin Sunburst

**Air Quality**

(possible concerns)

Long drilling time: No, 2 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, single derrick drilling rig to drill to 1450' TD.

Possible H2S gas production: None.

In/near Class I air quality area: No Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: \_\_\_\_\_

Comments: No special concerns – using small single derrick drilling rig to drill to 1450' TD.

**Water Quality**

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system, air, air mist drilling system to be used.

High water table: No high water table anticipated.

Surface drainage leads to live water: No live water nearby. Closest drainage is an unnamed ephemeral drainage, about 1/4 of a mile to the east of this location. About 3/4 of a mile to the southeast are some stock ponds.

Water well contamination: No, no water wells within 1 mile of this location.

Porous/permeable soils: No, silty sandy bentonitic soils.

Class I stream drainage: No Class I stream drainages.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☐ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: \_\_\_\_\_

Comments: 1340' of surface/production casing cemented to surface. No shallow freshwater zones in this area. Also, fresh water air/mist/freshwater mud systems to be used to drill this well.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings: No, stream crossings anticipated.  
High erosion potential: Small cut, up to 2.2' and small fill, up to 4.9', required.  
Loss of soil productivity: No, location will be restored after drilling if nonproductive. If productive unused portion of drill site will be reclaimed.  
Unusually large wellsite: No, 200'X200' location size required.  
Damage to improvements: Slight, surface use is cultivated fields..  
Conflict with existing land use/values Slight

Mitigation

- ☐ Avoid improvements (topographic tolerance)
- ☐ Exception location requested
- ☒ Stockpile topsoil
- ☐ Stream Crossing Permit (other agency review)
- ☒ Reclaim unused part of wellsite if productive
- ☐ Special construction methods to enhance reclamation
- ☐ Other \_\_\_\_\_

Comments: Access will be over existing county gravel roads. About 3/16 of a mile of new access road will be built into this location. Drilling fluids will be allowed to evaporate in the earthen pits. Cutting will be buried in the earthen pits after the drying. No special concerns.

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### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: None nearby. Closest residences are 1 mile and further away in any direction.

Possibility of H<sub>2</sub>S: None.

Size of rig/length of drilling time: Small drilling rig/short 2 to 4 days drilling time.

Mitigation:

- ☐ Proper BOP equipment
- ☐ Topographic sound barriers
- ☐ H<sub>2</sub>S contingency and/or evacuation plan
- ☐ Special equipment/procedures requirements
- ☒ Other: BOP requirement waived 36.22.1014 at the request of the operator.

Operator will install a 4 ½" orbit valve on the 4 ½" casing prior to drilling into the pressured formation. Swift Formation is very tight sandstone.

Comments: Adjacent plugged well was reentered after the well started to flow from the Ferdig Swift Unit waterflood.

### Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species Listed threatened or endangered species in Toole County is the Black Footed Ferret.

Mitigation:

- ☐ Avoidance (topographic tolerance/exception)

☐ Other agency review (DFWP, federal agencies, DSL)

☐ Screening/fencing of pits, drillsite

☐ Other: \_\_\_\_\_

Comments: Surface is private cultivated field. No concerns

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### **Historical/Cultural/Paleontological**

(possible concerns)

Proximity to known sites None identified

Mitigation

☐ avoidance (topographic tolerance, location exception)

☒ other agency review (SHPO, DSL, federal agencies)

☐ Other: \_\_\_\_\_

Comments: Surface is private cultivated field. No concerns.

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### **Social/Economic**

(possible concerns)

☐ Substantial effect on tax base

☐ Create demand for new governmental services

☐ Population increase or relocation

Comments: No concerns. Existing oil field, Kevin Sunburst Oil & Gas

Field.

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### **Remarks or Special Concerns for this site**

Well is a 1450' Rierdon Formation test. A development well in the Kevin Sunburst Oil & Gas Field.

### **Summary: Evaluation of Impacts and Cumulative effects**

No long term impacts expected, some short term impacts will occur.

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I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/ Steven Sasaki

(title:) Chief Field Inspector  
Date: April 21, 2010

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)  
Toole County water wells  
(subject discussed)  
April 21, 2010  
(date)

US Fish and Wildlife, Region 6 website  
(Name and Agency)  
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES  
MONTANA COUNTIES, Toole County  
(subject discussed)  
April 21, 2010  
(date)

If location was inspected before permit approval:

Inspection date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Others present during inspection: \_\_\_\_\_